



TITLE:

## Cover & Contents

AUTHOR(S):

---

CITATION:

Cover & Contents. 数理解析研究所講究録別冊 2012, B33

ISSUE DATE:

2012-07

URL:

<http://hdl.handle.net/2433/196264>

RIGHT:

**RIMS Kôkyûroku Bessatsu B33**

# Harmonic Analysis and Nonlinear Partial Differential Equations

edited by Mitsuru Sugimoto and Tohru Ozawa

July, 2012

Research Institute for Mathematical Sciences  
Kyoto University

*RIMS Kôkyûroku Bessatsu B33*

*Harmonic Analysis  
and  
Nonlinear Partial Differential Equations*

*July 4 ~6, 2011*

*edited by Mitsuru Sugimoto and Tohru Ozawa*

*July, 2012*

*Research Institute for Mathematical Sciences*

*Kyoto University, Kyoto, Japan*

The papers presented in this volume of RIMS Kôkyûroku Bessatsu are in final form and refereed.  
©2012 by the Research Institute for Mathematical Sciences, Kyoto University. All rights reserved.  
Printed in Japan.

# Preface

This volume collects original papers written by the speakers of a RIMS Symposium “Harmonic Analysis and Nonlinear Partial Differential Equations,” held at Research Institute for Mathematical Sciences, Kyoto University, in July 4-6, 2011.

The symposium “Harmonic Analysis and Nonlinear Partial Differential Equations” has been held annually at RIMS since 1997.

Its purpose is to provide the opportunity for specialists in various areas of harmonic analysis and nonlinear partial differential equations to exchange ideas and the latest developments and to build networks.

Financial support from RIMS and JSPS Grant-in-Aid for Scientific Research (B) #20340029, Challenging Exploratory Research #20654015 is gratefully acknowledged.

Thanks are due to the referees for their efficient work.

June, 2012

Mitsuru Sugimoto and Tohru Ozawa

# CONTENTS

Jonathan Bennett and Neal Bez · · · · ·	1
A majorant problem for the periodic Schrödinger group	
Loukas Grafakos · · · · ·	11
Multilinear operators in harmonic analysis and partial differential equations	
Keiichi Kato, Shingo Ito and Masaharu Kobayashi · · · · ·	29
Application of wave packet transform to Schrödinger equations	
Keiichi Kato, Masaharu Kobayashi and Shingo Ito · · · · ·	41
Remarks on Wiener amalgam space type estimates for Schrödinger equation	
Yonggeun Cho, Gyeongha Hwang and Sanghyuk Lee · · · · ·	49
An endpoint Strichartz estimate in spherical coordinates	
Okihiro Sawada · · · · ·	59
A description of Bourgain-Pavlović's ill-posedness theorem of the Navier-Stokes equations in the critical Besov space	
Masahiro Ikeda, Akihiro Shimomura and Hideaki Sunagawa · · · · ·	87
A remark on the algebraic normal form method applied to the Dirac-Klein-Gordon system in two space dimensions	
Okihiro Sawada and Ryo Takada · · · · ·	97
Propagation of the analyticity for the solution to the Euler equations with non-decaying initial velocity	
Naohito Tomita · · · · ·	111
A remark on multilinear Fourier multipliers satisfying Besov estimates	